THE FIRST INCUBATOR

Directions Followed Closely Will Result in Larger Percentage of Chicks.

BY BESSIE L. PUTNAM.

amount of work; there is no trouble

On the other hand, a reliable hen will produce fewer cripples, and perhaps have better success if the eggs happen to not be perfectly fresh; yet on this to not be perfectly f

barn or some other out-of-the-way
place where it will be subjected to extremes of weather and little care.

The third year (1907) two fine crops

But if you have a dry and well-ventilated room with a temperature of \$8.50 seed. This one year the preferably 60 degrees and not lower than 50 degrees at any time, and are Fine ground rock phosphate, 1,500 if you do not want to raise more than to this clover ground.

eggs are aired they become chilled too



THE ORIGINAL INCUBATOR.

suddenly and too much. If there are and lamp will require very close-watch-

While it should not be necessary to sit up nights with the incubator, neither is it wise to treat it like a clock—to be wound up once a day and

large enough, by placing the machine in one corner. Many successful poul-tially materialize or wholly fail to astry women give it a place in the living room, and even the parlor may be used, as there is nothing unsightly or un-

chosen it will be found cumbersome; it requires too long time for filling if our own eggs are used; if the hatch happens to be a poor one your loss is that much greater A machine of about 100-egg capacity

bator. Have it on a firm, level foundation and remember that good vended to try it on a dation and remember that good vended to try it on a firm, level foundation and avoidance of drafts are his hogs were not fattening up as much as necessary to the chick in embryo as as they should, and aithough there was to the human being the property of the human being the should and aithough there was as they should, and aithough there was to the human being the property of the human being the property of the human being the property of the chick in embryo as the proper

percentage of chicks. Never use much better.

WORK IN THE HOME DAIRY

Powdered borax used occasionally in place of soap will keep the milk cans

It is a good plan to have two sets It is a good plan to have two sets of milk utensils. Rinse with clear hotwater in which there is a handful of salt. Use no soap and let the utensils used for night's milk have the sun and if during the day and those used for corning's milk have the sir at night.

corning's milk have the air at night.

Handle the cow with her first calf
very gently. She is naturally irritaple, and feverish and her udder and
waste are quite tender.

Allow the calf to stay with her for

Sprague II

bushel and two outside and two outsides of the producers.

The men were paid \$6,000,000 in
waste, the average cost of saving the
and 1908. Bred and owned by P. H.

Sprague II

bushel and two outsides of the four of them.

I used a riding plow so I could give
the revenue of the producers.

The men were paid \$6,000,000 in
waste, the average cost of saving the
and 1908. Bred and owned by P. H.

Sprague III

bushel and two outsides of the four of them.

I used a riding plow so I could give
the revenue of the producers.

The men were paid \$6,000,000 in
waste, the average cost of saving the
cover and it took my attention and my
crop being 10 cents a bushel, exclupatience, too, for every once in a while
one of the four would stop to eat grass.

Atlan a while by spicking right to it

few days, because if it should be taken away at once she would fret and

SCIENTIFIC METHODS EMPLOYED

There is no better capital in farming than knowledge. But it is easier to appreciate this when we see it worked out in tangible results. To see the truth about our soil and actually apply the treatment demanded mean ample reward.

Judge J. Otis Humphrey of the United States District court at Spring-BY BESSIE L. PUTNAM.

It is ready to work at any and all of this. He is a careful student of seasons; the oil to run it costs less than the food for hens doing the same acre farm adjoining his land could be tion is. Where and how? Certainly amount of work; there is no trouble induced to quit its loading and get not on the wing, and often in a way from vermin; brollers can be produced down to business, the soil itself being that they can be easily destroyed.

The third year (1907) two fine crops of clover were produced, two tons per

Fine ground rock phosphate, willing to give it a reasonable amount pounds per acre, and a heavy application of care, the investment will pay, even tion of barnyard manure were applied

hundred chicks in a season.

A cold room necessitates running the last spring the clover had made a lamp at the highest notch and doubling growth of twenty inches, and this supcorn was planted early, well worked per acre of well-matured corn, which nearly equaled the value of the last year's clover crop.

The four crops paid for the farm, the fertilizer and manures, all labor bestowed and left some margin besides. The burs are gone. Much of the manure and phosphorus applied remains in the soil to increase future crops. Under this more intelligent treatment greater use will be made of the plant ood that was in the soil. This farm

Those actual results on a Sangamon county farm speak louder than any mere argument could for heeding the teachings of science and the methods of the most successful farmers and having the courage to put into actual practice the proven principles of agriulture -Arthur J. Bill, Illinois Farm

TO RAISE PURE-BRED COLTS

In all pure breeds the original "scrub" blood at the foundation is ever seeking to reinstate itself. In short, there left to itself for the remainder of the is a tendency in all pure-bred animals to degenerate or retrogress toward A cellar is apt to be damp and lack original and less perfect types, and ventilation. A chamber makes too much running up and down stairs. It possible have it in a room adjoining the one where the work is done.

Good results come, if the kitchen is large enough by placing the reaching the makes and nothing will more surely and speedily stimulate this tendency than lack of nutritious food. In the absence of sufficient nutrition or complete nutrition the possibilities of perfection inherited from pure-bred already and the possibilities of perfection inherited from pure-bred already and speedily support to the possibilities of perfect types, and nothing will more surely and speedily stimulate this tendency than lack of nutritions or complete nutrition the possibilities of perfect types, and nothing will more surely and speedily stimulate this tendency than lack of nutritions food.

The well-born but incompletely nour-

make. As a rule it is so small that it is difficult to secure uniformity of temperature in the egg chamber.

The nursery an important adjunct is usually lacking in the smallest machines. If one of the largest size is chosen it will be found cumbersome: it eccesses with the found cumbersome: it is difficult to secure uniformity of temperature in the egg chamber.

The nursery an important adjunct developing animal against every possible cause of debility, discomfort and ill health that would tend to retard its chosen it will be found cumbersome: it eccesses to leave the course of all clear, entry full and good. These are infinitely bettered the course of all clear, entry full and good. These are infinitely better than we ever will be profitable for layers when good be profitable for layers when good be profitable for layers when good death. Presently they make a clicking the filling on their backs and feigning death. Presently they make a clicking the profitable for layers when good better than we ever will be profitable for layers when good death. Presently they make a clicking the profitable for layers when good better than we ever will be profitable for layers when good death. Presently they make a clicking that the present they make a clicking that the profitable for layers when good death. Presently they make a clicking that the profitable for layers when good better than we ever will be profitable for layers when good death. Presently they make a clicking that the profitable for layers when good better than we ever will be profitable for layers when good layers prevailed.

They need the comforts, healthful-mean developing animal against every possible for layers when good layers prevailed.

They need the comforts, healthful-mean developing animal against every possible for layers when good layers prevailed.

They need the comforts will not be profitable for layers when good layers prevailed.

They need the comforts will not be profitable for layers when good layers prevailed.

They need the comforts will no ficient, disease must be fought against, vermin must be prevented from sapping the constitution, and fresh air. sunlight, adequate exercise and kindly care must take a full part in perfecting

as hecessary to the chick in embryo as to the human being.

The experienced hand always runs an incubator a day before filling, to inake ever that the parts are working to the proceeded to dose up some incubator. The lady bug in various forms is no disease among them, as he could discover, he concluded they needed a should be always carefully guarded as one of the best aids in destroying note of success. make sure that the parts are working strychnine to give them. He gave it properly. The novice with a new ma- to them in a body, and of course some black dot on each wing cover is often done this month, chop up some black dot on each wing cover is often done this month, chop up some black dot on each wing cover is often done this month, chop up some phine should not feel it time lost to of them got more than their share. Walt until three days after she has parned to control the heat at or about the required netch. The germs are specially sensitive during the first few would weigh about 200 pounds. It is not safe to give strong, medicine to animals without knowing its effect.

The fresher the error the heat at or about the required netch. The germs are would weigh about 200 pounds. It is beetle and destroyed, though the latter beetle and destroyed, though the latter of smaller and black and white, with simply a longitudinal band of duil red animals without knowing its effect.

The fresher the error the heat at or about died, and died quickly, and almost tory or window garden.

It is often mistaken for the buffalo beetle and destroyed, though the latter is smaller and black and white, with simply a longitudinal band of duil red be kept in covered the cans. The fresher the eggs the larger the strychnine can be given to bogs or to most any other animal without serious along both sides of the back. two weeks old, and two days is results, but it must be given in proper quantities and had better be prescribed by a physician or a veterinary

PRIZE-WINNING CHICKENS



taken away at once she would fret and add to her fever.

She will probably act unnaturally, but this will be due to her concition and not always to her disposition. If she is not handled with gentleness at this critical time she may develop into an unruly or even a vicious cow.

Never allow any person who has just gome from the sick room to milk a gow.

Persons who have the care of diphtheria or scarlet fever patients should never enser the dairy.

The New Hampshire station has demonstrated the fact that the steady loss of weight which fruits undergo, even under most favorable conditions of storage, is due to a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, even under most favorable conditions of storage, is due to a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, even under most favorable conditions of storage, is due to a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, even under most favorable conditions of storage, is due to a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, even under most favorable conditions of storage, is due to a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, at process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, a process of station has demonstrated the fact that the steady loss of weight which fruits undergo, a process of stream, in the station has demonstrated the fact that the steady loss of weight which fruits undergo, at process. The New Hampshire station has

WAR ON THE BUGS NOW

Begin the Fight Early and Keep It Up if You Would Eliminate These Pests.

RY J. FISHER.

All insects pass the winter in some

amount of work, the construction amount of work, the soli lister construction or the incubator is less work than that of the hens to do its work, especially during the inclement season, and is more agreeable. These are some of the arguments in favor of the incubator.

Arguments in favor of the incubator.

The soli lister construction of business, the soli lister construction or down to busines

is especially a favorite remedy for cut-

The pupa of the tomate worm is

HARVESTING A BIG CROP

Twenty-two hundred and fifty com-

CAPACITIES OF CISTERNS

Capacity For Each
in 10. suches
gailens. in Depth.

gallons.

VENTILATE THE HOG PENS

An important feature of this hous center of the roof. The hole is made by sawing off opposite ends of two roo boards and covering it with a cap s arranged as to leave openings 3 by 12



inches on each side of the roof. This life of the family.

SWEET PEAS REQUIRE A GREAT DEAL OF WATER

BEAUTIFY THE HOME YARD

To Neglect Things That Beautify and Uplift Character Does Not Always Pay.

BY H. H. SHEPARD.

The home grounds should be ample, as arge as is consistent with the size of cess is built upon failures. Profit by feetly healthy stock. Animals chosen the dwelling, and much larger than the mistakes.

come grounds the better will be the or more covering this.

Notice that I say a reliable hen. But these are rare. The average hen will cot be better than the incubator, while many fall far below the machine in results.

If you contemplate putting it in the I you contemplate putting it in the ground results.

If you contemplate putting it in the ground results are rare of the coverage and the remains of last years and the remains of last years and if more ventilation is desired it can to enlarge the farm in area, in buying crop being common lurking places.

Fire is a sure destroyer and cleans the spring. The harvest resulted in a yield of seventeen bushels per acre. The latent half of the cockle bur seed, which had lain in the ground two years, came along with the clover, and the remains of last years and if more ventilation is desired it can to enlarge the farm in area, in buying crop being common lurking places.

Fire is a sure destroyer and cleans the ground nicely for plowing.

Early plowing in spring is hard on latent that of the cockle bur seed, which had lain in the ground two years, came being cleared of them by frest. This

and a mark of good taste and charac-

ter on the part of the farmer.
Good fences around all the home grounds and lots are a necessary conof the picture as a whole.

THE KITCHEN WINDOW BOX

Sow seeds of curled parsley in the window box and keep in the kitchen The immediate grounds about the window. Besides being fine for soups arm dwelling can be made beautiful it makes fine garnish for meat and tance in selecting animals for the foun-

It is a wrong estimate of life and open trenches, covering according to the score of health. Breeding and property to be forever making money size, pressing down the soil with a rearing the animals needed to replenpiece of flat board.

covered, larger seeds to a deeper depth.

Many hard-shelled seeds, like the canna, must have the outer shell filed or soaked by pouring boiling water over, letting stand until cool before with the head. On every farm of saw

off." Give plenty of air and sunshine and thin the plants to avoid spindling subjected to regulations suitable to any growth. Transplant to other boxes as hospital or quarantine growth indicates in order to give stocky growth.

There are many of the cidents and allments to which demostic animals are subject which can be the can be the controlled to t

flowering bulbs in late February or March. Plant double daisy seeds to be transplanted later outside. Use judgment in position and account of the control of ment in potting and planting, suiting these operations to your ability to care for the young plants. Nothing is gained by early planting if neglect is practiced.

FENCE RAIL PHILOSOPHY

Drug stores are necessary, of course,

I spent three weeks last summer in lected to secure proper means a big city, and the old farm never looked so good to me as when I drove through the big gate on the evening I came home. The country home is the came home. The country home is the came home, and that is free from the country home is the came home. The country home is the came home arth that is free from the country home is the came home. ne place on earth that is free from

cannot dodge that. A robber cow-one that does not earn her keep by giving milk-can be turned into money n the butcher's block. In planning our work it is well to plan for profits as well as for yield.

plenish with loads of manure, and then we will not need to read, study, observe sunshine, and the application of the and practice. There is an opening for some enter- fort of cows which one would approve

application. Rust eats like a mort- caretaker to detect and correct the gage, which has an appetite like a

PLANT AN ORCHARD

I am a commercial fruit grower, but all the same I advise all farmers to grow fruit for their families for the pleasure of having it fresh and abundant the year around, for the healthfulness of it and to make the farm at tractive to the children.

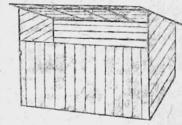
Some say they can buy what they want, but they seldom buy freely, or they can't spare the time and labor; but these cost far less than to buy much

It should be deemed a duty to supply the family with fruit in great abunlance the entire year, The family fruit orchard should be

near the house for convenience, even if some distant knoll may be really a better spot for the fruit. Accessibility should decide.

It should be a leng and proportionately narrow rectangular plot, for the trees are essentials for completing the pleture, but flowers and shrubs must possible, and should be tiled if it needs

PIANO BOX MANURE SHED



nure shed. Manure should always be kept protected from rain and snow,

late James G. Blaine, once secretary of state, lives with his mother in Chicago and has gone into the business of supplying "guaranteed eggs" to customers. One ranchman states that about 100 of his best 4-year-old steers were killed by it. They have applied

FORMING A DAIRY HERD

Animals Chosen Should Be Carefully Selected and Tested Physically.

BY PROFESSOR H. E. ALVORD.

salad dishes.

In plant raising and growing succhases of additions than to get pershould be critically examined and should afford evidence of being strong in constitution and of healthful vigor.

An acre is not too much. Some may should be four to six inches deep, a in constitution and of healthful vigor. It is advised that all be tuberculin to waste on a simple dooryard, but it bored holes in the bottom for drainage. must be remembered that this part of the farm is where the farmer and his family live and spend a greater part of their time, and that the better the fine, sifted soil to a depth of an inch which they are descended and the herd. stables and farms from which they Scatter the seeds, or plant in little come should be closely examined on ish and increase the herd and refusing Very small seeds should be barely to allow strange animals on the farm

> over, letting stand until cool before planting.
>
> The soil should be well wet, then covered with a piece of flannel and set away in a dark, warm place until the little plants begin to show, then brought gradually to the light, removing the cover. Sprinkle the soil carefully so as not to disturb the young rootlets.
>
> at least one month before mingling with the herd. On every farm of any size a well-secluded building for a stock quarantine and hospital suitably arranged and equipped is a most useful adjunct. This is not needed for calving cows or for cases of kameness or or ordinary accident, but for cases of acute sickness, retention of afterbirth, abortion or any symptoms of contaabortion or any symptoms of conta-Do not keep too wet, or the young plants will have a tendency to "damp of conta-

managed by an intelligent owner or one may well follow this suggestion within reasonable limits, but there is always a point hard to define at which summoned.

So long as an owner is certain of the difficulty and has knowledge and experience as to treatment or remedy he may depend upon home resources. But Drug stores are necessary, of course, in cases of obscurity, uncertainty or complications the owner of a good cow disregards his own interests and his moral obligation if he fall to summon store. a veterinarian, as much as if he neg-I spent three weeks last summer in lected to secure proper medical serv

Close confinement, with impure air There is only one way to know just to the health of milch cows as to that whether our cows are robbers or pro-of human beings. Some recently pro-ducers—buy a Babcock tester. They mulgated theories of dark, warm stables and no exercise for profitable milk production are without a rational basis and certain to lead to disastrous results sooner or later. Exposure to storms and cold is equally injurious to The yield is not all. We will need to seek weak places in the fields and re-

The well-born but incompletely nourished colt fails to develop and at manifer as there is nothing unsightly or untidy about the work save the day or two during the hatching process; and then the interest makes amends for the temporary disorder.

Before buying, secure catalogues from several reliable dealers, study carefully the claims of the manufacturers and your own requirements.

Avoid the cheapest machine of any make. As a rule it is so small that it is your fault.

The well-born but incompletely nourished on the garden and is distinguished by an appendage like the transmitted by an appendage like the transmitted only into the colt from some or protectly and fully feel in this stage most insect life is downant, the temporary disorder.

Before buying, secure catalogues from the dealers, study carefully the claims of the manufacturers and your own requirements.

Avoid the cheapest machine of any make. As a rule it is so small that it is your fault.

The well-born but incompletely nourished on the develop and at mainty is no less a 'weed' than is the oditing the extra money on property to be handed down to the children or putting it in the bank.

The early multies will be doing excellent and the late mounting our present will be doing excellent and the late in this stage most insect life is downant, the stage when there is any negative to be handed down to the children or putting it in the bank.

The sall ynglight the extra money on property to be handed down to the children or putting it in the bank.

The tar money on property to be handed down to the children or putting the in this stray money on property to be handed down to the children or putting it in the bank.

The well-born understood the proper stage is the option of any period of occurse they have been have like due to find the int it is your fault.

The early multiest will in this to introduce the proper stage down to work.

The tenth manufacture in the deal is an opening for some enter.

The tenth manufacture in the deal is an opening fiertory in t ginnings of trouble and thus maintain

NUBBINS OF FARM NEWS

the general health of the herd.

The Arteraft institute of Chicago recently purchased 300 acres of land near that city, which will be used for an educational farm for the teaching of the smaller outdoor industries.

A farmer near Windsor, Kan., has made a record with his cows and chickens. In nine months he has sold \$168.85 worth of butter made from the milk from three cows, and in seven months has sold \$123.60 worth of eggs and raised \$75 worth of chickens from 175 hens. Professor C. C. Georgeson, head of

the agricultural experiment station in Alaska, has arrived from Nome and says that he ate watermelons grown in the open at Manley Hot Springs, in the Tanana valley, was served with tomatoes grown in the open, saw a cornfield where the stulks stood seven feet high and traveled through farms on the Yukon where wheat, barley, oats and rye were maturing. A Swedish professor is experiment-

ing with rateing electrified crops. He has been conducting these experiments for some years and reports that strawbergies yield 35 per cent more fruit when treated with electricity than ordinarily. In 1908 an electrified plot of wheat yleided 41.4 bushels an acre, while the unelectrified plot gave but He also claims that the 32 bushels. electrified plants are hardier. Inquiries conducted in over 1,000 counties of the United States by the

Department of Agriculture indicate that the average length of haul of crops over country roads is 12.1 miles, the average weight of the load 2,002 pounds and the average cost per mile 25.8 cents, or about 38 per load, the figures being based on cost of labor, feed, wear, etc.

A weed known to ranchmen of Mon tana as "the deadly aconite weed" causes heavy losses among stock. It BLAINE'S GRANDSON SELLS EGGS is found about watering places, grows 18 inches high and is easily pulled out Emmons Blaine, the grandson of the by the roots. Cattle relish it, roots and

and all kinds of grains are being raised.

and wets every portion of the plants WORK IN THE POULTRY YARD

A good way to aprinkle sweet peas is by means of a small hand sprayer. It forces the water under the leaves

If you do not get a reasonably good crop of eggs this month make up your,

often plowed up in the garden and is mind that it is your fault.

distinguished by an appendage like the The early pullets will be d

when they scamper off.

Their larvae live near the surface of occasional outing like this does them property or money.

found about houses in winter and should be transferred to the conserva-

LIVING IN PECOS VALLEY

sive of bags and haulage to warehouses.

After a while by sticking right to it

They need not necessarily be wide, but
there should be enough to them so that

not expend any means on making the present the very best that it can be. They remain shabby and unimproved, ex-

They need the comforts, healthfuldays and allow the birds outdoors. An ter than inherited real estate, personal

the ground, and from their long, scarcely tapering form and hard covering are lenown as wire-worms. There

| Consider the surface of the specific of the second but do not expose them to heavy wind, rain and snow storms. The child whose home life is perfect to heavy wind, rain and snow storms.

| Keep the rains as clear of snow as will go out into the world with a rich will go out into the world will be wi A machine of about 100-egg capacity is large enough for the beginner, contains all essential conveniences, and one can later increase the capacity if success attends the humbler effort.

Study both directions and machine thereoughly before starting the inoughly before many swire-worms. There is hardly a cultivated plant which they do not infest, and, working as they do beneath the soil, they are difficult to cope with. If the cells containing the paper that strychnine is a good tonic for hogs and concluded to try it on dation and remember that good year.

A farmer read in an alleged farm paper that strychnine is a good tonic for hogs and concluded to try it on aftern, level foundation and remember that good year.

open part of the space should be lawn of good graes and be kept mown low at all times so that air and sunlight troubles. may purify the soil

The lawn is for use, to walk and play on, and should be laid out with that in view. "Keep off the grass" "Keep off the grass" may be all right for city parks, but the home lawn is a green carpeted outdoor floor for everyday use. Abundance of flowers, shrubs and

e massed in clumps and borders along the sides, and the trees must be grouped in one place, preferably the rear or somewhat removed from one

Twenty-two hundred and fifty combined harvesting machines, operated by steam, gaseline, borses and mules, and 60,000 men were required to garner the wheat crop, estimated at 60,000 bushels, in Washington, Oregon and Idaho last reason.

The value of the crop is piaced at from \$45,000,000 to \$50,000,000. The machines cut about 5 per cent of the total yield and on this it is estimated that there was a saving of 5 cents a bushel and two bushels of waste grain to the acre, adding nearly \$2,000,000. part of the grounds, a children's play-

made they would be in places in which we should not want them.

For wet weather concrete walks are comfortable and economical. Concret we got some plowing dene and raised some corn and maize.

A boy's life on a farm is not complete without a pony and a deg and a gun, and I have all of these.

there should be enough to them so that all outbuildings and other much frequented places can be reached without walking on the wet ground. Walks a gun, and I have all of these. gun, and I have all of these.

There are plenty of rabbits, so my and such can be made at a trifling

Under the trees in the [A Boy's Interesting Letter of New Mexico.]

this critical time she may develop into an unruly or even a victous cow. Never allow any person who has just come from the sick room to milk a sow. Persons who have the care of diph-their or scarled or sever east the ever enter the darry.

It is dangerous to keep milk in a cellar water and sever enter the darry.

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It is dangerous to keep milk in a cellar water a sickroom, as dangerous to keep milk in a cellar water a sickroom, as dangerous to keep milk in a cellar water a sickroom, as dangerous to water and water a sickroom, as dangerous to keep milk in a cellar water a sickroom, as dangerous to water and water a sickroom, as dangerous to water and water a sickroom, as dangerous to we been contracted in that water a sickroom, as dangerous to we been contracted in that water a sickroom, as dangerous to we been contracted in that water a sickroom, as dangerous to we keep milk in a cellar water a sickroom, as dangerous to we keep milk in a cellar water a sickroom, as dangerous to we keep milk in a cellar water a sickroom and the term the diameter.

It is dangerous to keep milk in a cellar water a sickroom, as dangerous to we keep milk in a cellar water a sickroom as the term than none, there are plenty of rabbits, so my in the diameter. 205 to the diameter. 205 the diameter